

# Class 14

## Topics

- Simple Machine Failure Model
- Intermediate Machine Failure Model

# Machine Repair Model

## Parameters

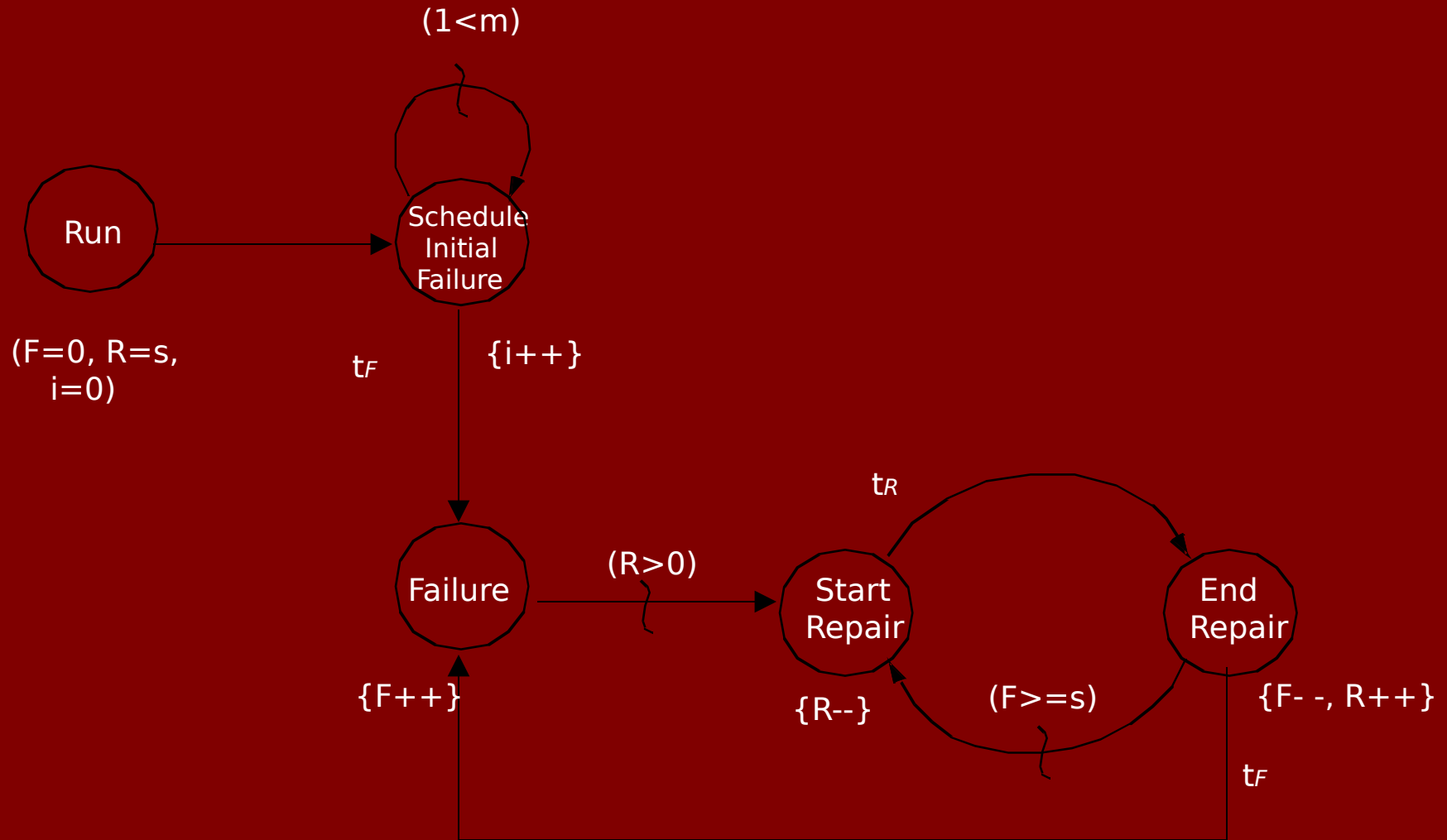
- $\{t_F\}$  = times to failure following repair
- $\{t_R\}$  = repair times for machines
- $m$  = # machines
- $s$  = # repair people

## State Variables

- $F$  = # failed machines
- $R$  = # available repair people
- $i$  = index for initial scheduling of failure events<sub>1</sub>

1: This would be better done using an argument on the event instead

## Event Graph



Discrete Event Simulation Modeling